

WHAT IS CLAIMED IS:

1. A hemispherical double monopole meander line loaded antenna.
2. The antenna of Claim 1, wherein said antenna includes a bifurcated hemisphere resulting in two adjacent semi-hemispherical elements separated by a slot.
3. The antenna of Claim 2, wherein said antenna includes a vertical radiator extending from beneath said semi-hemispherical elements to the vicinity of said slot.
4. The antenna of Claim 3, wherein said antenna includes meander lines connected between said vertical radiator and respective semi-hemispherical elements.
5. The antenna of Claim 3, wherein said vertical radiator is fan-shaped.
6. The antenna of Claim 5, wherein said antenna includes meander lines connected between said vertical radiator and respective semi-hemispherical elements.
7. The antenna of Claim 5, and further including an antenna feed coupled to the apex of said fan-shaped vertical radiator.
8. The antenna of Claim 2, wherein said antenna includes a ground plane spaced from the bottom of said semi-hemispherical elements.

9. A method of providing an ultra-wideband meander line loaded antenna, for use in a radome of limited size, comprising the steps of:

providing a hemispherical double monopole meander line loaded antenna; and,

mounting the hemispherical double monopole meander line loaded antenna in the radome.

10. A method of making a double monopole meander line loaded antenna, comprising the steps of:

providing a hemispherical radome;

patterning the interior surface of the radome with a bifurcated layer of conductive material so as to form two semi-hemispherical elements separated by a slot;

providing a vertical radiator forming a top edge at the slot;

connecting a pair of meander lines between the top edge of the vertical radiator and respective semi-hemispherical elements;

locating a ground plane beneath the elements; and,

providing an antenna feed between the bottom of the vertical radiator and the ground plane.

11. A method of minimizing the physical extent of a double monopole meander line loaded antenna having a bifurcated top plate and a ground plane plate without materially

affecting antenna characteristics, comprising the step of bending the distal ends of the bifurcated top plate towards the ground plane plate.

12. The method of Claim 11, wherein the bent bifurcated top plate is arcuate in cross-section.

13. The method of Claim 11, wherein the bent bifurcated top plate is in the form of a bifurcated hemisphere.